Section:	Enterprise Information Services
Unit:	Business Information System
<b>Position Number:</b>	065-501-4870-902
<b>Classification:</b>	Student Assistant - Programmer
<b>Revised Date:</b>	10/15/2016

<u>Supervision</u>: The Student Assistant will work under the close supervision of the hiring manager or supervisor, in a learner capacity, to assist in the performance of the technical duties of the Business Information System (BIS) Program Enterprise Information Services (EIS) California Department of Corrections and Rehabilitation (CDCR).

**Knowledge**: The Student Assistant must have knowledge in elementary SAP principles and procedures; principles and procedures of information technology (IT) system programming; general operating principles, capabilities, and limitations of IT system equipment; use and application of programming languages, job control language, and assembly language; and a variety of base arithmetic (binary, hexadecimal, octal, etc.).

<u>Ability</u>: The Student Assistant should exhibit the ability to use programming principles and procedures; use programming languages; use programming tools and equipment; present solutions to problems with clarity and precision in written and/or graphic form; compose structured IT systems programs; write clear and concise narrative statements and draw logical diagrams; reason logically and creatively; develop IT system routines; analyze data and draw logical conclusions; write effectively; analyze situations accurately; prepare effective reports; detect, analyze, and correct errors in programs; learn new programming languages; analyze work systems into logical components; analyze data and draw logical conclusions; suggest alternative systems to reflect user requirements and constraints; adopt an effective course of actions; communicate effectively; and establish and maintain cooperative working relationships.

<u>Guidelines</u>: Work is performed under well-defined guidelines and assignments are reviewed while in progress.

<u>Complexity</u>: The level of responsibility and complexity will be commensurate with the Student Assistant's academic level, knowledge, and comprehension. The Student Assistant will assist, in a learning capacity, with a variety of programming and/or IT projects related to Business Software Development and Support of the existing BIS Enterprise Resource Planning (ERP) System and programs. The Student Assistant will learn to develop, enhance, and maintain Business Application Programs in SAP/ABAP Systems, and software within windows, Web, and Mobile environments.

**Personal Contact:** The Student Assistant may telework and report to the manager/supervisor regularly via conference calls, video, etc. The Student Assistant will also have some contact with BIS Functional Leads and Staff, BIS Management and end-users via conference calls, video, etc.

Specific responsibilities include the following:

#### 45% | Application Development

- Assist with writing, compiling, and modifying applications programs for computerized systems and keys into program code.
- Assist with the development or acquisition of test data and running tests to determine the
  accuracy of program logic to produce desired results; assist with debugging and revising
  programs based on test results.
- Learn to use program specifications to assist in preparing the logical sequence of program source statements in the development, modification, documentation, and maintenance of computer programs.
- Assist with the development and preparation of documents for the general design of IT solutions that meet system and security requirements, including the selection of alternative approaches.
- Learn to assist with the development and maintenance of automated data processing systems and computer application programs.
- Learn how to develop specifications to detail what new systems or enhancements to existing systems can accomplish.
- Learn to and assist with converting and implementing new systems or upgrades existing systems. Assist with the development, implementation, and monitoring of IT quality assurance standards. Learn to maintain records and prepare reports and correspondence related to the work. Assist with special assignments related to IT programming, studies, or projects related to the student's IT career or curriculum goals.
- Assist with administering, implementing, and providing technical support of applications and associated software used in a client server environment. Assist with planning, designing, and overseeing analytical and technical assignments/tasks, and the implementation of computer hardware, software, and network components.
- Receive on-the-job training in programming and information processing to develop competency.
- Learn to review and analyze assignments to resolve any deficiencies or problems in producing the specified output.
- Learn to develop IT system application programs, program segments, file descriptions, and record layouts based on comprehensive programming specifications.
- Learn to develop program logic.
- Learn to utilize programming tools.
- Learn to write program code using appropriate IT system languages and access methods.
- Learn to assist with the development of test plans and executing tests for accuracy in the processing of information.
- Learn to plan and develop programs to be processed by IT system equipment.
- Learn to perform systems analysis or systems programming (software) work.
- Assist with the design of applications programs and routines from program specifications.
- Learn to code, test, debug documents, and install applications and routines.
- Learn to determine and analyze the information processing needs of end-users.

• Learn to design, monitor, and implement systems, programs, and routines.

### 35% Operations

- Learn to test programs, systems, and integration of system modules.
- Learn to determine the logical order in which processes should be manipulated in a program or system.
- Learn to produce necessary documentation.
- Learn to develop, install, and measure system programs.
- Learn to evaluate proposed new or modified IT system hardware and software.
- Learn how to develop operational and installation procedures for communication systems, hardware, network security, storage, and software.
- Study the principles and techniques of the area of work assigned.
- Learn to develop arrangement of programs within the system, master file layouts, etc., based on general system design needs.
- Receive assignments in oral and written form to develop new IT system programs and to modify existing programs within a system
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- Learn to establish the feasibility of IT system solutions.

### 20% | Administrative and Other Duties as Required

- Learn to provide less complex technical assistance to management and Technical Project Managers in request management, project prioritization, resource allocation, and regular portfolio reviews. Assist with the research, collection and evaluation of project data necessary to meet project reporting and evaluation requirements.
- Learn to provide less complex technical assistance to management and Technical Project Managers in the creation of projects. Assist with the development, maintenance, updating, and oversight of project plans and schedules using tools established by the CDCR. Learn to monitor and maintain the project communication plan and process.

Employee:	Date:	
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Immediate Supervisor:	Date:	

#### **Desired Qualifications:**

- Willingness to do detailed work requiring a high degree of mental concentration.
- Demonstrate capacity for development (learning).
- Willingness and ability to learn from on-the-job instruction and to perform unskilled and semi-skilled work.
- Follow oral, gestural, and/or written directions.
- Work courteously and cooperatively with others.
- Acquire acceptable work habits and meet production standards.
- Take initiative, possess strong customer service skills.
- Be highly organized with the ability to multi-task.
- Proficient with written and communication.
- Proficiency in MS Office Tools including: Word, Excel, PowerPoint, and Visio.
- Computer programming and application development, academic training in SAP ERP operation and programming (ABAP).
- Successful completion of academic courses or proven experience in Programming languages such as ABAP, Java, JavaScript, .Net, etc.